REMARKS/ARGUMENTS

Reconsideration is respectfully requested of the Official Action of January 11, 2007 relating to the above-identified application.

A request for a three month extension of time, together with the associated fee, is filed herewith.

The claims in the case are 26 to 28, 30 to 32, 34 to 40, 42 to 71 and 73. Claims 41 and 72 drawn to the non-elected subject matter have been deleted in order to expedite prosecution.

The rejection of Claims 59 and 63 under 35 U.S.C. § 112 (1st paragraph) on the ground of lack of enablement is traversed and reconsideration is respectfully requested. The Official Action alleges that the specification does enable any person skilled in the art to which it pertains to use the invention commensurate in scope with the claims. The Official Action is directed particularly to the invention as expressed in Claim 59 which calls for the method for producing a lactosamine-containing compound with a beta 1-4 linkage where the enzyme glycosidase is used *in vivo* or *in vitro*. The reference to the method being carried out "*in vivo*" does not refer to the method being carried out in the body of a patient. Instead, the "*in vivo*" method is carried out by the yeast cell itself and not in the body. As explained in the application in paragraph 0032, the reaction can be carried out with the enzyme *in vivo* that is, under fermentation conditions with intact yeast cells. In other words, the reaction takes place in the cell itself.

With respect to Claim 63, the method defined therein concerns the feature of the present invention of adding a second enzyme to convert the lactosamine-containing compound having the beta 1-4 linkage to a trisaccharide containing lactosamine derivative. This subject matter is fully disclosed in the application beginning in paragraph 0041 which explains that a second enzyme which specifically removes glucose may be added during the reaction. Alternatively, the second enzyme can be used to convert the product to another desired product.

Further examples of conversion by enzymatic methods are found in paragraph 0044. For example, the products can be used for further enzymatic synthesis with glycosidases or glycosyltransferases as described in paragraph 0042. The formation of oligosaccharides is described therein. Thus the present application is respectfully submitted to provide the guidance which would allow a skilled artisan to extrapolate from the disclosure and the examples provided to enable the use of the second enzyme to convert the lactosamine derivative to another desired product.

The rejection of Claims 26 to 28, 30 to 32, 34 to 40, 42 to 71 and 73 under 35 U.S.C. § 112 (2nd paragraph) as allegedly indefinite is traversed and reconsideration is respectfully requested. The Official Action discusses that broad and narrow limitations are not permitted in the same claim and applicants have amended Claim 26 and other claims which recited the objected-to language in order to clarify that the substituent in (b) NR" can be an inorganic and/or an organic group bound to the 2-N-group of glucosamine. It is believed the claims are now clear and free of the objection noted in the Official Action.

The Official Action also had objected to Claim 29 which has now been deleted. Claim 54 has been amended to refer to the R group as being a sugar, lower alkyl or an aromatic group. Basis for this recitation is found in the published application in col. 1, paragraph 0011.

Claim 31 has also been amended to correct the definition of the substituent R to be consistent with the disclosure found in paragraph 0011 as the preferred substituents. No new matter is involved with these amendments.

Claims 34 and 35 have been amended in a similar way and no new matter has been introduced in those claims.

With regard to Claim 38 and the comment in the Official Action concerning step 3, applicants have now inserted in step 3 that when the substituent Gal-ß-OR is lactose, the second enzyme is added which results in the removal of glucose. This is discussed in paragraph 0041 of the published application.

With regard to the objection in the Official Action concerning the term "partially" in Claim 46, this term has now been deleted from that claim.

Claim 63 has been amended to specify the nature of the "desired product" that was referred to in the original text of that claim, and therefore the claim should now be free of objection.

With respect to Claim 66, this claim covers the subject matter of Example 1 and therefore it is clear that the product produced there is clearly shown in the application as originally filed.

In Claims 68 and 69, there was a typographical error in the designation of the formula and this has now been corrected in both claims. Also, there was an inaccurate formula in the third line of Claim 69 which now has also been corrected. It should be noted that Claim 69 is directed to the subject matter of Example 4.

Claim 73 has also been corrected as suggested in the Official Action.

With respect to the double patenting rejection, applicants will address the issue of double patenting upon an indication of allowable subject matter in this application.

The rejection of Claims 26 to 28, 30 to 32, 34 to 40, 42-71 and 73 under the 35 U.S.C. § 103(a) is traversed and reconsideration is respectfully requested. The Official Action relies on applicants previously issued international publication WO89/09275 in combination with applicants earlier article which appeared in the Carbohydrate Research publication of 1987, 167, 95-103. Applicants' international publication WO89/09275 discloses of a method of preparing of oligosaccharide compounds by reaction of a donor compound and an acceptor compound in the presence of a glycosidase and at least one glycosyltransferase as a catalyst. A two-step process is shown on page 4.

The WO publication discloses a variety of reactions but fails to disclose the preparation of lactosamine containing compounds with a ß1-4 linkage by the method defined in the claims herein.

The Carbohydrate Research article fails to show the method claimed herein. A person skilled in the art having these two reference before him would not be led to make any replacements or substitutions whereby a person skilled in the art would arrive at the claimed subject matter. The claims specify that the method of invention is for producing a lactosamine-containing compound with a ß 1-4 linkage by reacting a donor substance such as galactose or a compound represented by the generic formula Galß-O R and at least one acceptor compound which is a glucopyranosamino compound in the presence of the glycosidase or a *Bullera singularis* or disintegrated cells thereof. This is not disclosed or described in the reference, nor would a person skilled in the art be led to applicants' subject matter. The method of the present invention is directed to a particular subject matter whereas the Carbohydrate Research article is not directed to production of a particular substance.

Accordingly, applicants respectfully submit that the references do not create *prima facie* obviousness of the claimed invention and accordingly request withdrawal of the rejection.

Favorable action at the Examiner's earliest convenience is respectfully requested.

Respectfully submitted,

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